

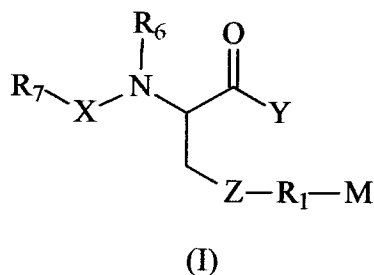
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-83 (Canceled).

84. (New) A compound having the formula (I), or a pharmaceutically acceptable derivative, salt, racemate, isomer or tautomer thereof:



wherein

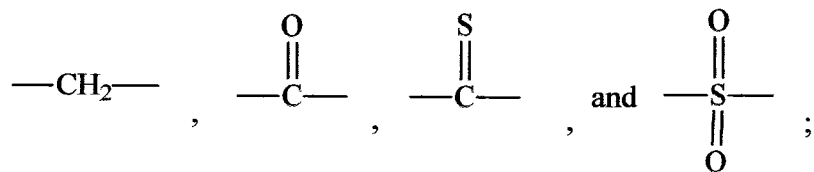
Z is S or CH₂;

R₁ is a linking moiety;

M is a zinc binding moiety containing at least one heteroatom;

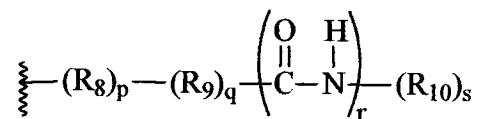
R₆ is selected from the group consisting of H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl and a nitrogen protecting group;

X is selected from the group consisting of:



Y is selected from the group consisting: of $-\text{NR}_4\text{R}_5$, $-\text{OR}_4$, $-\text{SR}_4$, $-\text{CH}_2\text{R}_4$, CHR_4R_5 , $\text{C}(\text{R}_4)_2\text{R}_5$, PHR_4 and PR_4R_5 ,

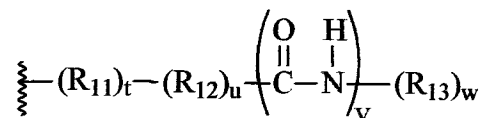
wherein R_4 is a group of formula:



wherein R_8 , R_9 and R_{10} are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heterocycloalkyl;

p , q , r and s are each independently 0 or 1, provided that at least one of p , q or s is 1;

R_5 is H or a group of formula:

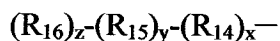


wherein R_{11} , R_{12} and R_{13} are each independently selected from the group consisting of

optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or optionally substituted heterocycloalkyl;

t, u, v and w are each independently 0 or 1, provided that at least one of t, u and w is 1;

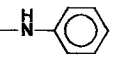
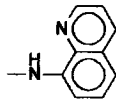
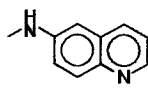
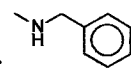


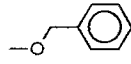
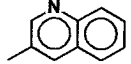



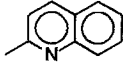
R₇ is a group of formula:

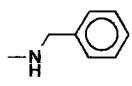



wherein R₁₄, R₁₅ and R₁₆ are independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl and optionally substituted heterocycloalkyl,

x, y and z are independently 0 and 1 with the proviso that at least one of x, y and z is 1,

with the proviso that:

when Z is CH₂ and Y is , ,  or , then R₆ is not H, X is not  and R₇ is not , , , , , ,  or -OC(CH₃)₃; and

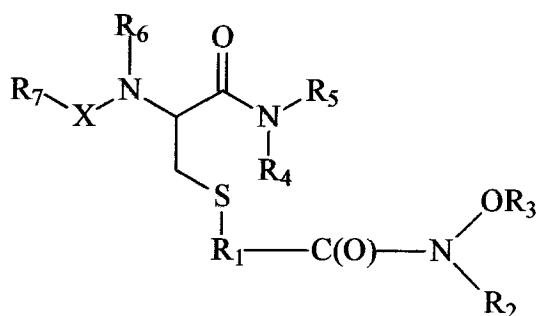
when Z is CH₂ and Y is , then R₆ is not H, X is not  and R₇ is not -CH₃.

85. (New) A compound as in claim 84, wherein the zinc binding moiety is a group of formula $-C(O)-NR_2-OR_3$ where R_2 is H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, or a nitrogen protecting group and R_3 is H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl or an oxygen protecting group.

86. (New) A compound as in claim 85, wherein the linking moiety has between 1 and 9 atoms in the normal chain.

87. (New) A compound as in claim 86, wherein the linking moiety is an n-propyl chain.

88. (New) A compound having the formula (IIIa), or a pharmaceutically acceptable derivative, salt, racemate, isomer or tautomer thereof:



(IIIa)

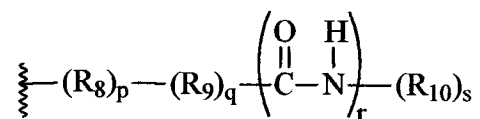
wherein

R₁ is optionally substituted C₁-C₄ alkyl, optionally substituted C₁-C₄ alkenyl or optionally substituted C₁-C₄ alkynyl;

R₂ is H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, or a nitrogen protecting group;

R₃ is H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl or an oxygen protecting group;

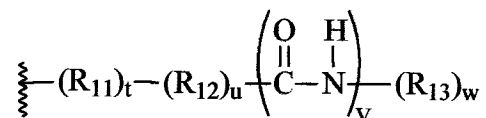
R₄ is a group of formula:



wherein R₈, R₉ and R₁₀ are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heterocycloalkyl;

p, q, r and s are each independently 0 or 1, provided that at least one of p, q or s is 1;

R₅ is H or a group of formula:



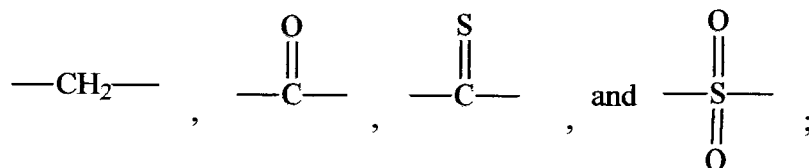
wherein R₁₁, R₁₂ and R₁₃ are each independently selected from the group consisting of

optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or optionally substituted heterocycloalkyl;

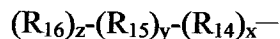
t, u, v and w are each independently 0 or 1, provided that at least one of t, u and w is 1.

R₆ is selected from the group consisting of H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl and a nitrogen protecting group;

X is selected from the group consisting of



R₇ is a group of formula:



wherein R₁₄, R₁₅ and R₁₆ are independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl and optionally substituted heterocycloalkyl;

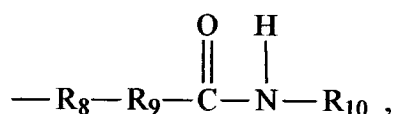
x, y and z are independently 0 and 1 with the proviso that at least one of x, y and z is 1.

89. (New) A compound as in claim 88, wherein R₁ is n-propyl.

90. (New) A compound as in claim 88, wherein R₂ is either H, optionally substituted C₁-C₄ alkyl or a nitrogen protecting group.

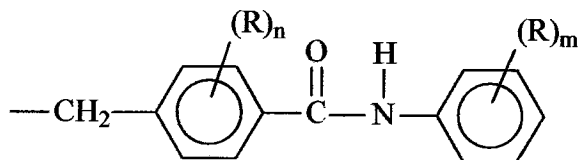
91. (New) A compound as in claim 88, wherein R₃ is either H, optionally substituted C₁-C₄ alkyl or an oxygen protecting group.

92. (New) A compound as in claim 88, wherein R₄ is of the formula:



wherein R₈, R₉ and R₁₀ are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heterocycloalkyl.

93. (New) A compound as in claim 92, wherein R₄ is a group of the formula.



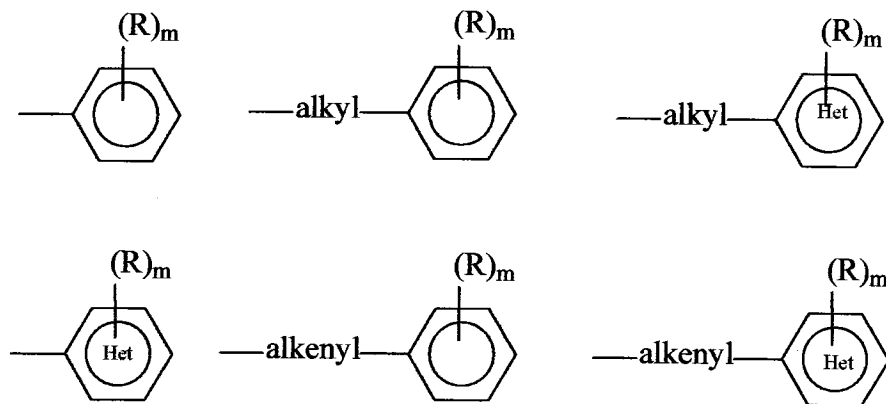
wherein each R is independently selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, halo, haloalkyl, haloalkenyl, haloalkynyl, haloaryl, haloheteroaryl, halocycloalkyl, haloheterocycloalkyl, hydroxy, alkoxy, alkenyloxy, aryloxy, heteroaryloxy, cycloalkyloxy, heterocycloalkyloxy, benzyloxy, haloalkoxy, haloalkenyloxy,

haloaryloxy, halohetoraryloxy, nitro, nitroalkyl, nitroalkenyl, nitroalkynyl, nitroaryl, nitroheteroaryl, nitroheterocycloalkyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylamino, heteroarylamino, diarylamino, benzylamino, dibenzylamino, acyl, alkenylacyl, alkynylacyl, arylacyl, heteroarylacyl, acylamino, diacylamino, acyloxy, alkylsulphonyloxy, arylsulphonyloxy, heterocycloalkylamino, alkylsulphonyl, arylsulphonyl, carboalkoxy, carboaryloxy, alkylthio, benzylthio, acylthio, cyano, nitro, sulfate and phosphate;

n is 0-4, and

m is 0-5.

94. (New) A compound as in claim 92, wherein R₄ has one of the following formulae:



wherein each R is independently selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, halo, haloalkyl, haloalkenyl, haloalkynyl, haloaryl, haloheteroaryl, halocycloalkyl, haloheterocycloalkyl, hydroxy, alkoxy, alkenyloxy, aryloxy, heteroaryloxy, cycloalkyloxy, heterocycloalkyloxy, benzyloxy, haloalkoxy, haloalkenyloxy, haloaryloxy, halohetoraryloxy, nitro, nitroalkyl, nitroalkenyl, nitroalkynyl, nitroaryl, nitroheteroaryl, nitroheterocycloalkyl, amino, alkylamino, dialkylamino, alkenylamino,

alkynylamino, arylamino, heteroaryl amino, diarylamino, benzylamino, dibenzylamino, acyl, alkenylacyl, alkynylacyl, arylacyl, heteroarylacyl, acylamino, diacylamino, acyloxy, alkylsulphonyloxy, arylsulphonyloxy, heterocycloalkylamino, alkylsulphonyl, arylsulphonyl, carboalkoxy, carboaryloxy, alkylthio, benzylthio, acylthio, cyano, nitro, sulfate and phosphate;

and each m is from 0-5.

95. (New) A compound as in claim 88, wherein R₅ is either H or optionally substituted alkyl.

96. (New) A compound as in claim 88, wherein X is a carbonyl group.

97. (New) A compound as in claim 96, wherein R₆ is either H or a nitrogen protecting group.

98. (New) A compound as in claim 96, wherein R₇ is selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted heteroaryl, optionally substituted heterocycloalkyl, optionally substituted aryl alkyl, optionally substituted heteroaryl alkyl, optionally substituted cycloalkyl alkyl, optionally substituted heterocycloalkyl alkyl, optionally substituted aryl alkenyl, optionally substituted hetero alkenyl, optionally substituted cycloalkyl alkenyl, optionally substituted heterocycloalkyl alkenyl, optionally substituted aryl alkynyl, optionally substituted heteroaryl alkynyl, optionally substituted cycloalkyl alkynyl, and optionally substituted heterocycloalkyl alkynyl.

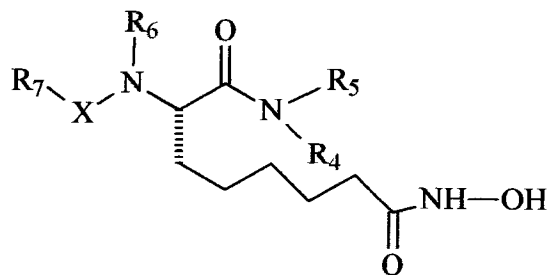
99. (New) A compound as in claim 88, wherein the compound has a potency of cytotoxicity of $IC_{50} \leq 10 \mu M$ against MM96 melanoma cells.

100. (New) A compound as in claim 99, wherein the compound has a Selectivity Index of ≥ 1.5 .

101. (New) A compound as in claim 100, wherein the compound has a potency of $IC_{50} \leq 1 \mu M$ against the MM96 melanoma cells and a Selectivity Index of ≥ 3 .

102. (New) A compound as in claim 101, wherein the compound has a potency of $IC_{50} \leq 0.5 \mu M$ against the MM96 melanoma cells and a Selectivity Index of ≥ 4 .

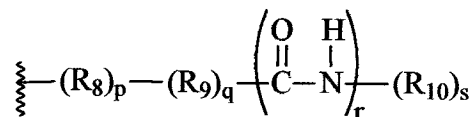
103. (New) A compound as in claim 84, wherein the compound has the formula (IIIb):



(IIIb)

wherein

R₄ is a group of formula:

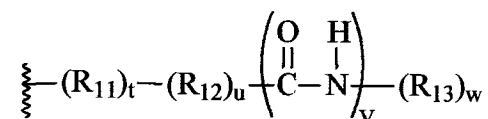


wherein R₈, R₉ and R₁₀ are each independently selected from the group consisting of

optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heterocycloalkyl;

p, q, r and s are each independently 0 or 1, provided that at least one of p, q or s is 1;

R₅ is H or a group of formula:

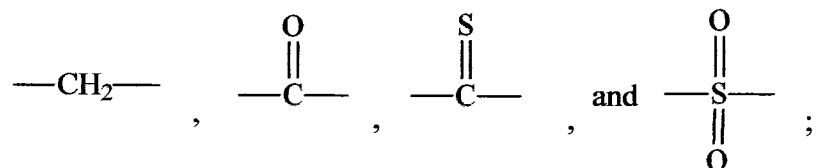


wherein R₁₁, R₁₂ and R₁₃ are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or optionally substituted heterocycloalkyl;

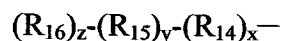
t, u, v and w are each independently 0 or 1, provided that at least one of t, u and w is 1.

R₆ is selected from the group consisting of H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl and a nitrogen protecting group;

X is selected from the group consisting of



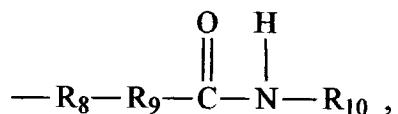
R₇ is a group of formula:



wherein R₁₄, R₁₅ and R₁₆ are independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl and optionally substituted heterocycloalkyl;

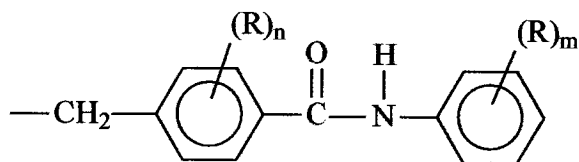
x, y and z are independently 0 and 1 with the proviso that at least one of x, y and z is 1.

104. (New) A compound as in claim 103, wherein R₄ is of the formula:



wherein R₈, R₉ and R₁₀ are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heterocycloalkyl.

105. (New) A compound as in claim 104, wherein R₄ is a group of the formula.

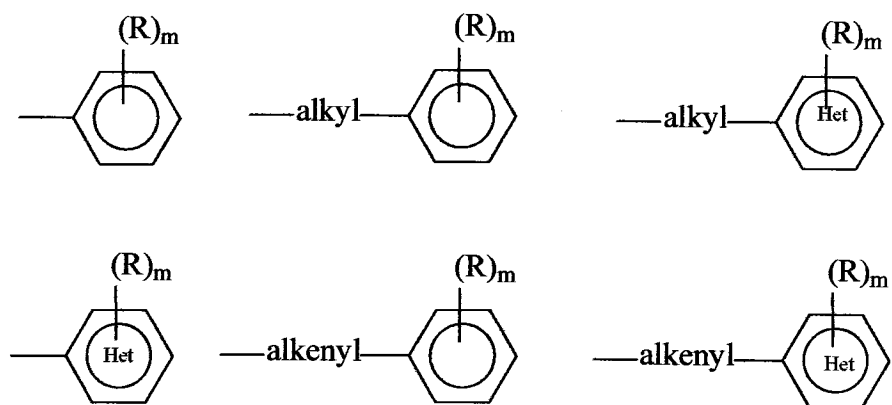


wherein each R is independently selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, halo, haloalkyl, haloalkenyl, haloalkynyl, haloaryl, haloheteroaryl, halocycloalkyl, haloheterocycloalkyl, hydroxy, alkoxy, alkenyloxy, aryloxy, heteroaryloxy, cycloalkyloxy, heterocycloalkyloxy, benzyloxy, haloalkoxy, haloalkenyloxy, haloaryloxy, haloheteroaryloxy, nitro, nitroalkyl, nitroalkenyl, nitroalkynyl, nitroaryl, nitroheteroaryl, nitroheterocycloalkyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylamino, heteroarylamino, diarylamino, benzylamino, dibenzylamino, acyl, alkenylacyl, alkynylacyl, arylacyl, heteroarylacyl, acylamino, diacylamino, acyloxy, alkylsulphonyloxy, arylsulphonyloxy, heterocycloalkylamino, alkylsulphonyl, arylsulphonyl, carboalkoxy, carboaryloxy, alkylthio, benzylthio, acylthio, cyano, nitro, sulfate and phosphate;

n is 0-4, and

m is 0-5.

106. (New) A compound as in claim 103, wherein R₄ has one of the following formulae:



wherein each R is independently selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, halo, haloalkyl, haloalkenyl, haloalkynyl, haloaryl, haloheteroaryl, halocycloalkyl, haloheterocycloalkyl, hydroxy, alkoxy, alkenyloxy, aryloxy, heteroaryloxy, cycloalkyloxy, heterocycloalkyloxy, benzyloxy, haloalkoxy, haloalkenyloxy, haloaryloxy, haloheteroaryloxy, nitro, nitroalkyl, nitroalkenyl, nitroalkynyl, nitroaryl, nitroheteroaryl, nitroheterocycloalkyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylamino, heteroarylamino, diarylamino, benzylamino, dibenzylamino, acyl, alkenylacyl, alkynylacyl, arylacyl, heteroarylacyl, acylamino, diacylamino, acyloxy, alkylsulphonyloxy, arylsulphonyloxy, heterocycloalkylamino, alkylsulphonyl, arylsulphonyl, carboalkoxy, carboaryloxy, alkylthio, benzylthio, acylthio, cyano, nitro, sulfate and phosphate;

haloheteroaryl, halocycloalkyl, haloheterocycloalkyl, hydroxy, alkoxy, alkenyloxy, aryloxy, heteroaryloxy, cycloalkyloxy, heterocycloalkyloxy, benzyloxy, haloalkoxy, haloalkenyloxy, haloaryloxy, haloheteroaryloxy, nitro, nitroalkyl, nitroalkenyl, nitroalkynyl, nitroaryl, nitroheteroaryl, nitroheterocycloalkyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylamino, heteroarylamino, diarylamino, benzylamino, dibenzylamino, acyl, alkenylacyl, alkynylacyl, arylacyl, heteroarylacyl, acylamino, diacylamino, acyloxy, alkylsulphonyloxy, arylsulphonyloxy, heterocycloalkylamino, alkylsulphonyl, arylsulphonyl, carboalkoxy, carboaryloxy, alkylthio, benzylthio, acylthio, cyano, nitro, sulfate and phosphate;

and each m is from 0-5.

107. (New) A compound as in claim 103, wherein R₅ is H.

108. (New) A compound as in claim 103, wherein X is a carbonyl group.

109. (New) A compound as in claim 108, wherein R₆ is either H or a nitrogen protecting group.

110. (New) A compound as in claim 108, wherein R₇ is selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted heteroaryl, optionally substituted heterocycloalkyl, optionally substituted aryl alkyl, optionally substituted heteroaryl alkyl, optionally substituted cycloalkyl alkyl, optionally substituted heterocycloalkyl alkyl, optionally substituted aryl alkenyl, optionally substituted hetero alkenyl, optionally substituted cycloalkyl alkenyl, optionally substituted heterocycloalkyl alkenyl, optionally substituted aryl alkynyl, optionally substituted heteroaryl alkynyl, optionally substituted cycloalkyl alkynyl, and optionally substituted heterocycloalkyl alkynyl.

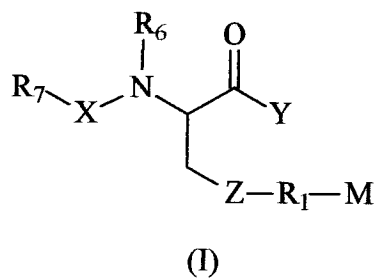
111. (New) A compound as in claim 103, wherein the compound has a potency of cytotoxicity of $IC_{50} \leq 10 \mu M$ against MM96 melanoma cells.

112. (New) A compound as in claim 111, wherein the compound has a Selectivity Index of ≥ 1.5 .

113. (New) A compound as in claim 112, wherein the compound has a potency of $IC_{50} \leq 1 \mu M$ against the MM96 melanoma cells and a Selectivity Index of ≥ 3 .

114. (New) A compound as in claim 113, wherein the compound has a potency of $IC_{50} \leq 0.5 \mu M$ against the MM96 melanoma cells and a Selectivity Index of ≥ 4 .

115. (New) A method for the treatment of cancer in an animal, the method including the step of administering to the animal in need of such treatment an effective amount of a compound having the formula (I), or a pharmaceutically acceptable derivative, salt, racemate, isomer or tautomer thereof:



wherein

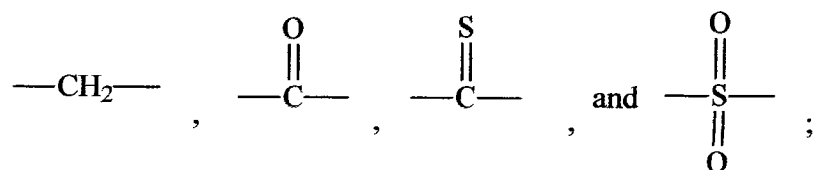
Z is S or $-CH_2-$;

R_1 is a linking moiety;

M is a zinc binding moiety containing at least one heteroatom;

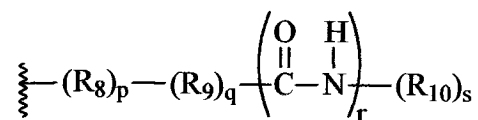
R₆ is selected from the group consisting of H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl and a nitrogen protecting group;

X is selected from the group consisting of:



Y is selected from the group consisting: of $-NR_4R_5$, $-OR_4$, $-SR_4$, $-CH_2R_4$, CHR_4R_5 , $C(R_4)_2R_5$, PHR_4 and PR_4R_5 ,

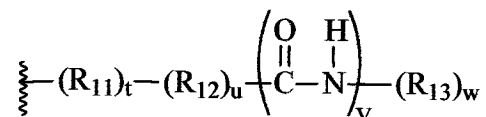
wherein R₄ is a group of formula:



wherein R₈, R₉ and R₁₀ are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heterocycloalkyl;

p, q, r and s are each independently 0 or 1, provided that at least one of p, q or s is 1;

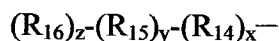
R₅ is H or a group of formula:



wherein R₁₁, R₁₂ and R₁₃ are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or optionally substituted heterocycloalkyl;

t, u, v and w are each independently 0 or 1, provided that at least one of t, u and w is 1;


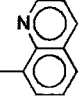
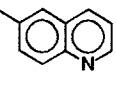



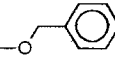
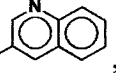



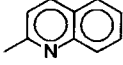
R₇ is a group of formula:

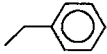



wherein R₁₄, R₁₅ and R₁₆ are independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl and optionally substituted heterocycloalkyl,

x, y and z are independently 0 and 1 with the proviso that at least one of x, y and z is 1,

with the proviso that:

when Z is CH₂ and Y is , ,  or , then R₆ is not H, X is not  and R₇ is not , , , , , ,  or -OC(CH₃)₃; and

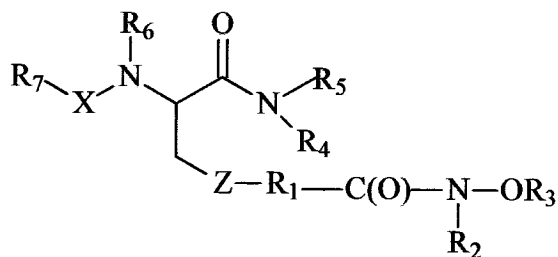
when Z is CH₂ and Y is , then R₆ is not H, X is not  and R₇ is not -CH₃.

116. (New) A method as in claim 115, wherein the linking moiety has between 1 and 9 atoms in the normal chain.

117. (New) A method as in claim 116, wherein the linking moiety is an n-propyl chain.

118. (New) A method as in claim 115, wherein Z is S.

119. (New) A method as in claim 115, wherein the compound has the formula (III):



(III)

wherein

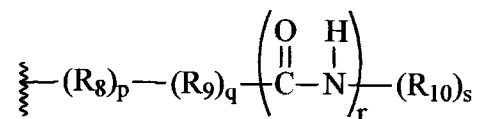
Z is S or CH₂;

R₁ is optionally substituted C₁-C₄ alkyl, optionally substituted C₁-C₄ alkenyl or optionally substituted C₁-C₄ alkynyl;

R₂ is H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, or a nitrogen protecting group;

R₃ is H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl or an oxygen protecting group;

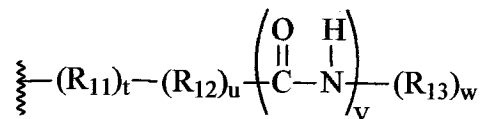
R₄ is a group of formula:



wherein R₈, R₉ and R₁₀ are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heterocycloalkyl;

p, q, r and s are each independently 0 or 1, provided that at least one of p, q or s is 1;

R₅ is H or a group of formula:

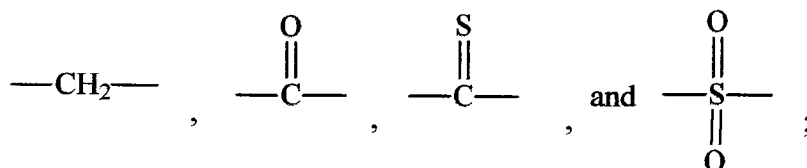


wherein R_{11} , R_{12} and R_{113} are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or optionally substituted heterocycloalkyl;

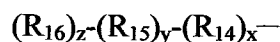
t , u , v and w are each independently 0 or 1, provided that at least one of t , u and w is 1;

R_6 is selected from the group consisting of H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl and a nitrogen protecting group;

X is selected from the group consisting of



R_7 is a group of formula:



wherein R_{14} , R_{15} and R_{16} are independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl and optionally substituted heterocycloalkyl,

x , y and z are independently 0 and 1 with the proviso that at least one of x , y and z is 1.

120. (New) A method for the treatment of cancer as in claim 119, wherein R₁ is optionally substituted C₁-C₄ alkyl.

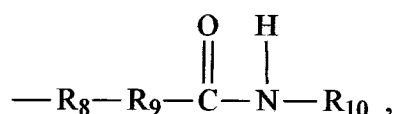
121. (New) A method for the treatment of cancer as in claim 120, wherein R₁ is propyl.

122. (New) A method for the treatment of cancer as in claim 119, wherein Z is S.

123. (New) A method for the treatment of cancer as in claim 119, wherein R₂ is either H, optionally substituted C₁-C₄ alkyl or a nitrogen protecting group.

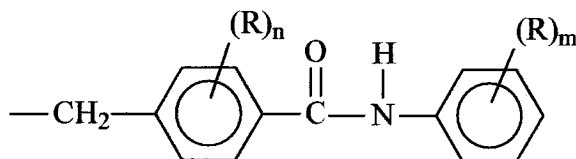
124. (New) A method for the treatment of cancer as in claim 119, wherein R₃ is either H, optionally substituted C₁-C₄ alkyl or an oxygen protecting group.

125. (New) A method for the treatment of cancer as in claim 119, wherein R₄ is of the formula:



wherein R₈, R₉ and R₁₀ are each independently selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heterocycloalkyl.

126. (New) A method for the treatment of cancer as in claim 125, wherein R₄ is a group of the formula.

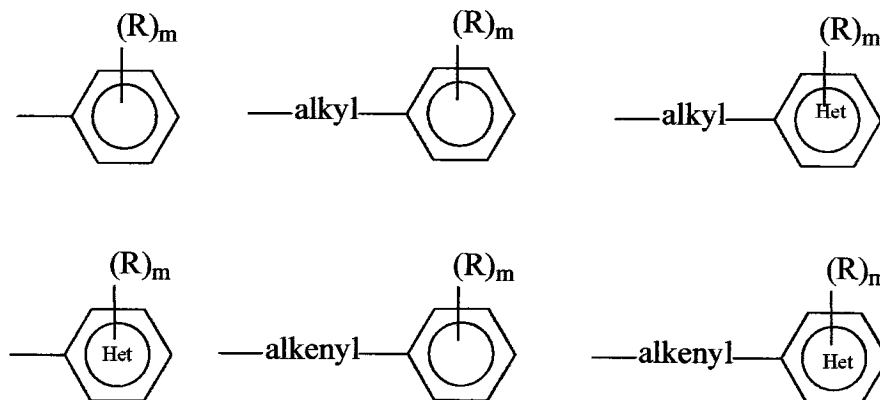


wherein each R is independently selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, halo, haloalkyl, haloalkenyl, haloalkynyl, haloaryl, haloheteroaryl, halocycloalkyl, haloheterocycloalkyl, hydroxy, alkoxy, alkenyloxy, aryloxy, heteroaryloxy, cycloalkyloxy, heterocycloalkyloxy, benzyloxy, haloalkoxy, haloalkenyloxy, haloaryloxy, haloheteroaryloxy, nitro, nitroalkyl, nitroalkenyl, nitroalkynyl, nitroaryl, nitroheteroaryl, nitroheterocycloalkyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylamino, heteroarylamino, diarylamino, benzylamino, dibenzylamino, acyl, alkenylacyl, alkynylacyl, arylacyl, heteroarylacyl, acylamino, diacylamino, acyloxy, alkylsulphonyloxy, arylsulphonyloxy, heterocycloalkylamino, alkylsulphonyl, arylsulphonyl, carboalkoxy, carboaryloxy, alkylthio, benzylthio, acylthio, cyano, nitro, sulfate and phosphate;

n is 0-4, and

m is 0-5.

127. (New) A method for the treatment of cancer as in claim 119, wherein R₄ has one of the following formulas:



wherein each R is independently selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, halo, haloalkyl, haloalkenyl, haloalkynyl, haloaryl, haloheteroaryl, halocycloalkyl, haloheterocycloalkyl, hydroxy, alkoxy, alkenyloxy, aryloxy, heteroaryloxy, cycloalkyloxy, heterocycloalkyloxy, benzyloxy, haloalkoxy, haloalkenyloxy, haloaryloxy, haloheteroaryloxy, nitro, nitroalkyl, nitroalkenyl, nitroalkynyl, nitroaryl, nitroheteroaryl, nitroheterocycloalkyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylamino, heteroarylamino, diarylamino, benzylamino, dibenzylamino, acyl, alkenylacyl, alkynylacyl, arylacyl, heteroarylacyl, acylamino, diacylamino, acyloxy, alkylsulphonyloxy, arylsulphonyloxy, heterocycloalkylamino, alkylsulphonyl, arylsulphonyl, carboalkoxy, carboaryloxy, alkylthio, benzylthio, acylthio, cyano, nitro, sulfate and phosphate;

and each m is from 0-5.

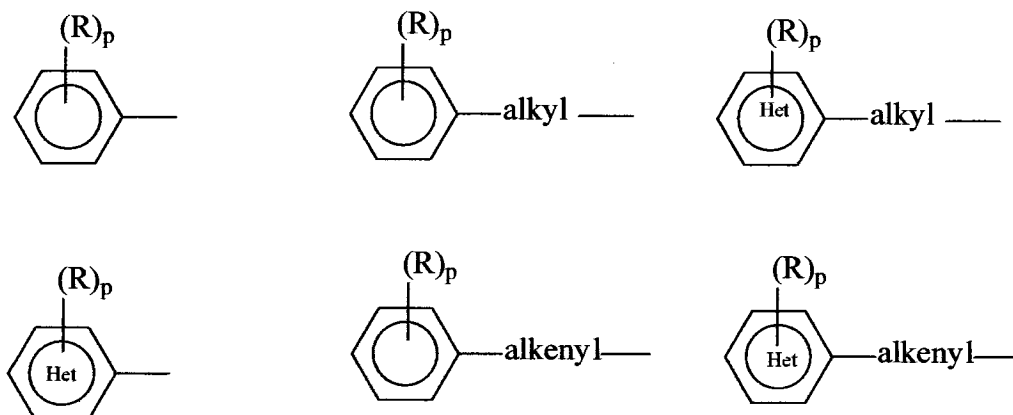
128. (New) A method for the treatment of cancer as in claim 119, wherein R₅ is either H or optionally substituted alkyl.

129. (New) A method for the treatment of cancer as in claim 119, wherein X is a carbonyl group.

130. (New) A method for the treatment of cancer as in claim 129, wherein R_6 is either H or a nitrogen protecting group.

131. (New) A method for the treatment of cancer as in claim 129, wherein R_7 is selected from the group consisting of optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted heteroaryl, optionally substituted heterocycloalkyl, optionally substituted aryl alkyl, optionally substituted heteroaryl alkyl, optionally substituted cycloalkyl alkyl, optionally substituted heterocycloalkyl alkyl, optionally substituted aryl alkenyl, optionally substituted hetero alkenyl, optionally substituted cycloalkyl alkenyl, optionally substituted heterocycloalkyl alkenyl, optionally substituted aryl alkynyl, optionally substituted heteroaryl alkynyl, optionally substituted cycloalkyl alkynyl, and optionally substituted heterocycloalkyl alkynyl.

132. (New) A method for the treatment of cancer as in claim 131, wherein R_7 has one of the following formula:



wherein each R is independently selected from the group consisting of alkyl, alkenyl, alkynyl,

aryl, heteroaryl, cycloalkyl, heterocycloalkyl, halo, haloalkyl, haloalkenyl, haloalkynyl, haloaryl, haloheteroaryl, halocycloalkyl, haloheterocycloalkyl, hydroxy, alkoxy, alkenyloxy, aryloxy, heteroaryloxy, cycloalkyloxy, heterocycloalkyloxy, benzyloxy, haloalkoxy, haloalkenyloxy, haloaryloxy, haloheteroaryloxy, nitro, nitroalkyl, nitroalkenyl, nitroalkynyl, nitroaryl, nitroheteroaryl, nitroheterocycloalkyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylamino, heteroarylamino, diarylamino, benzylamino, dibenzylamino, acyl, alkenylacyl, alkynylacyl, arylacyl, heteroarylacyl, acylamino, diacylamino, acyloxy, alkylsulphonyloxy, arylsulphonyloxy, heterocycloalkylamino, alkylsulphonyl, arylsulphonyl, carboalkoxy, carboaryloxy, alkylthio, benzylthio, acylthio, cyano, nitro, sulfate and phosphate;

and each p is from 0-5.

133. (New) A method for the treatment of cancer as in claim 119, wherein the compound has a potency of cytotoxicity of $IC_{50} \leq 10 \mu M$ against MM96 melanoma cells.

134. (New) A method for the treatment of cancer as in claim 133, wherein the compound has a Selectivity Index of ≥ 1.5 .

135. (New) A method for the treatment of cancer as in claim 134, wherein the compound has a potency of $IC_{50} \leq 1 \mu M$ against the MM96 melanoma cells and a Selectivity Index of ≥ 3 .

136. (New) A method for the treatment of cancer as in claim 135, wherein the compound has a potency of $IC_{50} \leq 0.5 \mu M$ against the MM96 melanoma cells and a Selectivity Index of ≥ 4 .

137. (New) A method for the treatment of cancer as in claim 119, wherein the animal is a human.

138. (New) A pharmaceutical composition containing one or more of the compounds of claim 84 and a pharmaceutically acceptable, carrier, diluent or excipient.

139. (New) The use of any one or more of the compounds of claim 84 for the preparation of a medicament for the treatment of cancer.